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EXAMINER	
DESIR, PIERRE LOUIS	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/759,024	Applicant(s) DAVIDSON ET AL.	
	Examiner Pierre-Louis Desir	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01/20/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 January 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *05/20/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the drawings are not legible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Rhodes et al. (Rhodes), Pub. No. US 2004/0038714.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Rhodes discloses a network management system for controlling a network of antennas including multiple antennas located on multiple sites (see fig. 10, page 4, paragraph 103) each of the antennas having antenna operating parameters (see abstract, and paragraph 49), the system comprising: a controller remotely located from the multiple sites of the network of antennas (see figs. 9-10, page 4, paragraph 102) for generating an IP address and establishing an IP connection to a data network in communication with the network of antennas (i.e., the network operator control an antenna via communication with base station, wherein the

connection is via WAN using internet protocols) (see fig. 29, page 6, paragraph 125-126), and for providing control signals to selected antennas in the network of antennas over said IP connection (see figs. 9-10, page 2, paragraph 49); and a user interface coupled to said controller for selecting antennas within the network of antennas and for controlling using said control signals selected antenna operating parameters of said selected antennas (see fig. 31, and page 7, paragraph 139).

Regarding claim 2, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes: process control for establishing groups of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within a group (see page 5, paragraph 116).

Regarding claim 3, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes: process control for changing a selected antenna operating parameter for a group of antennas located at a site (see page 2, paragraphs 44-46).

Regarding claim 4, Rhodes discloses a system (see claim 1 rejection) 1 wherein said user interface includes: process control for establishing a group of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within the group (see page 5, paragraph 116); process control for selecting an antenna operating parameter to be changed by said controller (see page 2, paragraphs 44-46); and process control for automatically scheduling execution of said antenna operating parameter changes for the antennas in the group of antennas (see page 5, paragraph 121).

Regarding claim 5, Rhodes discloses a system (see claim 1 rejection) further including a local area network interconnecting said controller and said user interface (i.e., antenna control

unit communicates via LAN with an antenna actuation means) (see figs. 29-30, and page 6, paragraph 135).

Regarding claim 6, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes a graphic display for displaying a representation of the network of antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139).

Regarding claim 7, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes a graphic display for displaying selected antenna operating parameters of selected antennas within the network of antennas (see fig. 32, page 7, and paragraph 142).

Regarding claim 8, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes a graphic display for displaying antenna operating parameters of antennas at selected sites within the network of antennas (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143).

Regarding claim 9, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes a graphic display for displaying user selected groups of antennas within the network of antennas (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139).

Regarding claim 10, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes a graphic display for displaying user selected antenna operating parameters for selected groups of antennas within the network of antennas (i.e., the viewed operating parameters

may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, paragraph 143).

Regarding claim 11, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes a graphic display for displaying user created schedules for controlling selected antenna operating parameters of selected antennas within the network of antennas (see fig. 34, page 7, paragraph 143).

Regarding claim 12, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes: a first graphic display for displaying a representation of the network of antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139); a second graphic display for displaying selected antenna operating parameters of selected antennas within the network of antennas (see fig. 32, page 7, and paragraph 142); a third graphic display for displaying antenna operating parameters of antennas at selected sites within the network of antennas (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143); a fourth graphic display for displaying user selected groups of antennas within the network of antennas (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139); a fifth graphic display for displaying user selected antenna operating parameters for selected groups of antennas within the network of antennas (i.e., the viewed operating parameters may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, paragraph 143); and a sixth graphic display for displaying user created schedules for controlling selected

antenna operating parameters of selected antennas within the network of antennas (see fig. 34, page 7, paragraph 143).

Regarding claim 13, Rhodes discloses a base station telecommunications system (see abstract and page 4, paragraph 93) comprising: a plurality of antenna sites (see fig. 10, page 4, paragraph 103); a plurality of antennas located a each of said plurality of antenna sites (see fig. 10, page 4, paragraph 103), each of said plurality of antennas having antenna operating parameters (see abstract, and paragraph 49); a data network in communication with said plurality of antenna sites (see fig. 10, page 4, paragraph 103); a processor remotely located from said plurality of antenna sites (see figs. 9-10, page 4, paragraph 102) for generating an IP address and establishing an IP connection to said data network (i.e., the network operator control an antenna via communication with base station, wherein the connection is via WAN using internet protocols) (see fig. 29, page 6, paragraph 125-126) for providing processor generated control signals to selected antennas over said IP connection for changing said antenna operating parameters (see figs. 9-10, page 2, paragraph 49); and a user interface coupled to said processor for selecting antennas and selecting antenna operating parameters of said selected antennas to be changed (see fig. 31, and page 7, paragraph 139).

Regarding claim 14, Rhodes discloses a system (see claim 13 rejection) wherein said antenna operating parameters are selected from the group consisting of elevation beam tilt, azimuth beam width, azimuth beam pointing, elevation beam width, azimuth beam shape and elevation beam shape (see fig. 15-16, page 5, paragraphs 112-114).

Regarding claim 15, Rhodes discloses a system (see claim 13 rejection) wherein said user interface includes: process control for establishing groups of antennas for simultaneously

changing antenna operating parameters of all antennas within a group (see page 5, paragraph 116).

Regarding claim 16, Rhodes discloses a system (see claim 13 rejection) wherein said user interface includes: process control for changing a selected antenna operating parameter for a group of antennas located at a site (see page 2, paragraphs 44-46).

Regarding claim 17, Rhodes discloses a system (see claim 13 rejection) wherein said user interface includes: process control for establishing a group of antennas for simultaneously changing antenna operating parameters of all antennas within the group (see page 5, paragraph 116); process control for selecting an antenna operating parameter to be changed by said processor (see page 2, paragraphs 44-46); and process control for automatically scheduling execution of said antenna operating parameter change for the antennas in the group of antennas (see page 5, paragraph 121).

Regarding claim 18, Rhodes discloses a system (see claim 13 rejection) further including a local area network interconnecting said processor and said user interface (i.e., antenna control unit communicates via LAN with an antenna actuation means) (see figs. 29-30, and page 6, paragraph 135).

Regarding claim 19, Rhodes discloses a system (see claim 13 rejection) wherein said user interface includes a plurality of user interfaces (i.e., PDA, computer) for allowing multiple users access to said local area network (see fig. 30, page 7, paragraph 137).

Regarding claim 20, Rhodes discloses a system (see claim 13 rejection) wherein said user interface includes: a first graphic display for displaying a representation of the network of antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular

communication site) (see fig. 31, page 7, paragraph 139); a second graphic display for displaying selected antenna operating parameters of selected antennas within the network of antennas (see fig. 32, page 7, and paragraph 142); a third graphic display for displaying antenna operating parameters of antennas at selected sites within the network of antennas (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143); a fourth graphic display for displaying user selected groups of antennas within the network of antennas (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139); a fifth graphic display for displaying user selected antenna operating parameters for selected groups of antennas within the network of antennas (i.e., the viewed operating parameters may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, paragraph 143); and a sixth graphic display for displaying user created schedules for controlling selected antenna operating parameters of selected antennas within the network of antennas (see fig. 34, page 7, paragraph 143).

Regarding claim 21, Rhodes discloses a system (see claim 13 rejection) wherein said processor generating control signals for controlling antenna equipment located at said antenna sites (i.e., each antenna includes an individual actuation means) (see fig. 19, page 5, paragraph 119).

Regarding claim 22, Rhodes discloses a method for controlling a network of antennas including multiple antennas located on multiple sites (see fig. 10, page 4, paragraph 103), each of the antennas having operating parameters (see abstract, and paragraph 49), the method

comprising: generating using a controller remotely located from the multiple sites of the network of antennas (see figs. 9-10, page 4, paragraph 102) an IP address and establishing an IP connection to a data network in communication with the network of antennas (i.e., the network operator control an antenna via communication with base station, wherein the connection is via WAN using internet protocols) (see fig. 29, page 6, paragraph 125-126)and providing control signals to selected antennas in the network of antennas over the IP connection (see figs. 9-10, page 2, paragraph 49); and selecting antennas within the network of antennas using an interface coupled to the controller for controlling selected antenna operating parameters of the selected antennas by the control signals (see fig. 31, and page 7, paragraph 139).

Regarding claim 23, Rhodes discloses a method (see claim 22 rejection) further including: establishing groups of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within a group (see page 5, paragraph 116).

Regarding claim 24, Rhodes discloses a method (see claim 22 rejection) further including: changing a selected antenna operating parameter for a group of antennas located at a site (see page 2, paragraphs 44-46).

Regarding claim 25, Rhodes discloses a method (see claim 22 rejection) further including: establishing a group of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within the group (see page 5, paragraph 116); selecting an antenna operating parameter to be changed by the controller (see page 2, paragraphs 44-46); and automatically scheduling execution of the antenna operating parameter changes for the antennas in the group of antennas (see page 5, paragraph 121).

Regarding claim 26, Rhodes discloses a method (see claim 22 rejection) further providing a local area network interconnecting the controller and the interface (i.e., antenna control unit communicates via LAN with an antenna actuation means) (see figs. 29-30, and page 6, paragraph 135).

Regarding claim 27, Rhodes discloses a method (see claim 22 rejection) further including: displaying a representation of the network of antennas on a display (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139).

Regarding claim 28, Rhodes discloses a method (see claim 22 rejection) further including: displaying selected antenna operating parameters of selected antennas within the network of antennas on a display (see fig. 32, page 7, and paragraph 142).

Regarding claim 29, Rhodes discloses a method (see claim 22 rejection) further including: displaying antenna operating parameters of antennas at selected sites within the network of antennas on a display (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143).

Regarding claim 30, Rhodes discloses a method (see claim 22 rejection) further including: displaying user selected groups of antennas within the network of antennas on a display (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139).

Regarding claim 31, Rhodes discloses a method (see claim 22 rejection) further including: displaying user selected antenna operating parameters for selected groups of antennas

within the network of antennas on a display (i.e., the viewed operating parameters may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, and paragraph 143).

Regarding claim 32, Rhodes discloses a method (see claim 22 rejection) further including: displaying user created schedules for controlling selected antenna operating parameters of selected antennas within the network of antennas on a display (see fig. 34, page 7, paragraph 143).

Regarding claim 33, Rhodes discloses a method (see claim 22 rejection) further including: displaying on a display a representation of the network of antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139); displaying on the display selected antenna operating parameters of selected antennas within the network of antennas (see fig. 32, page 7, and paragraph 142); displaying on the display antenna operating parameters of antennas at selected sites within the network of antennas (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143); displaying on the display user selected groups of antennas within the network of antennas (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139); displaying on the display user selected antenna operating parameters for selected groups of antennas within the network of antennas i.e., the viewed operating parameters may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, paragraph 143); and displaying on the display user created schedules for controlling selected antenna

operating parameters of selected antennas within the network of antennas (see fig. 34, page 7, paragraph 143).

Regarding claim 34, Rhodes discloses a method for controlling base station telecommunications comprising: providing a plurality of antenna sites (see fig. 10, page 4, paragraph 103); providing a plurality of antennas located a each of the plurality of antenna sites (see fig. 10, page 4, paragraph 103), each of the plurality of antennas having antenna operating parameters (see abstract, and paragraph 49); connecting a data network to the plurality of antenna sites (see fig. 10, page 4, paragraph 103); generating using a processor remotely (see figs. 9-10, page 4, paragraph 102) located from the plurality of antenna sites an IP address and establishing an IP connection to the data network (i.e., the network operator control an antenna via communication with base station, wherein the connection is via WAN using internet protocols) (see fig. 29, page 6, paragraph 125-126) for providing processor generated control signals to selected antennas over the IP connection for changing the antenna operating parameters (see figs. 9-10, page 2, paragraph 49); and selecting antennas and selecting antenna operating parameters of the selected antennas to be changed using an interface coupled to the processor (see fig. 31, and page 7, paragraph 139).

Regarding claim 35, Rhodes discloses a method (see claim 34 rejection) wherein he antenna operating parameters are selected from the group consisting of elevation beam tilt, azimuth beam width, azimuth beam pointing, elevation beam width, azimuth beam shape and elevation beam shape (see fig. 15-16, page 5, paragraphs 112-114).

Regarding claim 36, Rhodes discloses a method (see claim 34 rejection) further including: establishing groups of antennas for simultaneously changing antenna operating parameters of all antennas within a group (see page 5, paragraph 116).

Regarding claim 37, Rhodes discloses a method (see claim 34 rejection) further including: changing a selected antenna operating parameter for a group of antennas located at a site (see page 2, paragraphs 44-46).

Regarding claim 38, Rhodes discloses a method (see claim 34 rejection) and further including: establishing a group of antennas for simultaneously changing antenna operating parameters of all antennas within the group (see page 5, paragraph 116); selecting an antenna operating parameter to be changed by the processor (see page 2, paragraphs 44-46); and scheduling execution of the antenna operator parameter change for the antennas in the group of antennas (see page 5, paragraph 121).

Regarding claim 39, Rhodes discloses a method (see claim 34 rejection) further providing a local area network interconnecting the processor and the user interface (i.e., antenna control unit communicates via LAN with an antenna actuation means) (see figs. 29-30, and page 6, paragraph 135).

Regarding claim 40, Rhodes discloses a method (see claim 34 rejection) further including: allowing multiple users access to said local area network (see fig. 30, page 7, paragraph 137).

Regarding claim 41, Rhodes discloses a method (see claim 34 rejection) further including: displaying on a display a representation of the network of antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31,

page 7, paragraph 139); displaying on the display selected antenna operating parameters of selected antennas within the network of antennas (see fig. 32, page 7, and paragraph 142); displaying on the display antenna operating parameters of antennas at selected sites within the network of antennas (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143); displaying on the display user selected groups of antennas within the network of antennas (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139); displaying on the display user selected antenna operating parameters for selected groups of antennas within the network of antennas i.e., the viewed operating parameters may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, paragraph 143); and displaying on the display user created schedules for controlling selected antenna operating parameters of selected antennas within the network of antennas (see fig. 34, page 7, paragraph 143).

Regarding claim 42, Rhodes discloses a method (see claim 34 rejection) further including: controlling antenna equipment located at the antenna sites using the control signals sites (i.e., each antenna includes an individual actuation means) (see fig. 19, page 5, paragraph 119).

Regarding claim 43, Rhodes discloses a network management system for controlling a network of antennas including multiple antennas located on multiple sites (see fig. 10, page 4, paragraph 103) each of the antennas having antenna operating parameters (see abstract, and paragraph 49), the system comprising: a controller remotely located from the multiple sites of the

network of antennas (see figs. 9-10, page 4, paragraph 102) for generating an IP address and establishing an IP connection to a data network in communication with the network of antennas (i.e., the network operator control an antenna via communication with base station, wherein the connection is via WAN using internet protocols) (see fig. 29, page 6, paragraph 125-126), and for providing control signals to selected antennas in the network of antennas over said IP connection (see figs. 9-10, page 2, paragraph 49); a user interface coupled to said controller for selecting antennas within the network of antennas and for controlling using said control signals selected antenna operating parameters of said selected antennas (see fig. 31, and page 7, paragraph 139); process control for optimizing operation of the network based upon antenna operating parameters and network performance (see page 7, paragraph 141).

Regarding claim 44, Rhodes discloses a system (see claim 43 rejection) wherein said user interface includes: process control for establishing groups of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within a group (see page 5, paragraph 116).

Regarding claim 45, Rhodes discloses a system (see claim 43 rejection) wherein said user interface includes: process control for changing a selected antenna operating parameter for a group of antennas located at a site (see page 2, paragraphs 44-46).

Regarding claim 46, Rhodes discloses a system (see claim 1 rejection) 1 wherein said user interface includes: process control for establishing a group of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within the group (see page 5, paragraph 116); process control for selecting an antenna operating parameter to be changed by said controller (see page 2, paragraphs 44-46); and process control for

automatically scheduling execution of said antenna operating parameter changes for the antennas in the group of antennas (see page 5, paragraph 121).

Regarding claim 47, Rhodes discloses a system (see claim 43 rejection) further including a local area network interconnecting said controller and said user interface (i.e., antenna control unit communicates via LAN with an antenna actuation means) (see figs. 29-30, and page 6, paragraph 135).

Regarding claim 48, Rhodes discloses a system (see claim 43 rejection) wherein said user interface includes a graphic display for displaying a representation of the network of antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139).

Regarding claim 49, Rhodes discloses a system (see claim 43 rejection) wherein said process control for optimizing network operation includes a prestored database of antenna operating parameters for use by said controller for generating said control signals (i.e., the required coverage and optimisation parameters may be set for each site. The automatic compensation may automatically calculate the required operating parameters for the antennas based on this information) (see page 7, paragraph 141).

Regarding claim 50, Rhodes discloses a system (see claim 43 rejection) wherein said process control for optimizing network operation includes process control for monitoring the network in real time and providing said controller antenna operating parameters in real time to said controller (i.e., real time adjustment) (see page 6, paragraph 126).

Regarding claim 51, Rhodes discloses a system (see claim 1 rejection) wherein said user interface includes: a first graphic display for displaying a representation of the network of

antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139); a second graphic display for displaying selected antenna operating parameters of selected antennas within the network of antennas (see fig. 32, page 7, and paragraph 142); a third graphic display for displaying antenna operating parameters of antennas at selected sites within the network of antennas (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143); a fourth graphic display for displaying user selected groups of antennas within the network of antennas (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139); a fifth graphic display for displaying user selected antenna operating parameters for selected groups of antennas within the network of antennas (i.e., the viewed operating parameters may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, paragraph 143); and a sixth graphic display for displaying user created schedules for controlling selected antenna operating parameters of selected antennas within the network of antennas (see fig. 34, page 7, paragraph 143).

Regarding claim 52, Rhodes discloses a method for controlling a network of antennas including multiple antennas and equipment located on multiple sites (see fig. 10, page 4, paragraph 103), each of the antennas having operating parameters (see abstract, and paragraph 49), the method comprising: generating using a controller remotely located from the multiple sites of the network of antennas (see figs. 9-10, page 4, paragraph 102) an IP address and establishing an IP connection to a data network in communication with the network of antennas

(i.e., the network operator control an antenna via communication with base station, wherein the connection is via WAN using internet protocols) (see fig. 29, page 6, paragraph 125-126)and providing control signals to selected antennas in the network of antennas over the IP connection (see figs. 9-10, page 2, paragraph 49); and selecting antennas within the network of antennas using an interface coupled to the controller for controlling selected antenna operating parameters of the selected antennas by the control signals (see fig. 31, and page 7, paragraph 139); and optimizing operation of the network based upon antenna operating parameters and network performance (see page 7, paragraph 141).

Regarding claim 53, Rhodes discloses a method (see claim 52 rejection) further including: establishing groups of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within a group (see page 5, paragraph 116).

Regarding claim 54, Rhodes discloses a method (see claim 52 rejection) further including: changing a selected antenna operating parameter for a group of antennas located at a site (see page 2, paragraphs 44-46).

Regarding claim 55, Rhodes discloses a method (see claim 52 rejection) further including: establishing a group of antennas in the antenna network for simultaneously changing antenna operating parameters of all antennas within the group (see page 5, paragraph 116); selecting an antenna operating parameter to be changed by the controller (see page 2, paragraphs 44-46); and automatically scheduling execution of the antenna operating parameter changes for the antennas in the group of antennas (see page 5, paragraph 121).

Regarding claim 56, Rhodes discloses a method (see claim 52 rejection) further providing a local area network interconnecting the controller and the interface (i.e., antenna control unit

communicates via LAN with an antenna actuation means) (see figs. 29-30, and page 6, paragraph 135).

Regarding claim 57, Rhodes discloses a method (see claim 52 rejection) further including: displaying a representation of the network of antennas on a display (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139).

Regarding claim 58, Rhodes discloses a method (see claim 52 rejection) wherein optimizing operation of the network utilizes a prestored database of antenna operating parameters based upon calculated network operating parameters signals (i.e., the required coverage and optimisation parameters may be set for each site. The automatic compensation may automatically calculate the required operating parameters for the antennas based on this information) (see page 7, paragraph 141).

Regarding claim 59, Rhodes discloses a method (see claim 52 rejection) wherein optimizing operation of the network occurs in real time (i.e., real time adjustment) (see page 6, paragraph 126).

Regarding claim 60, (see claim 52 rejection) further including: displaying on a display a representation of the network of antennas (i.e., graphical elements illustrating beam coverage for a three sector cellular communication site) (see fig. 31, page 7, paragraph 139); displaying on the display selected antenna operating parameters of selected antennas within the network of antennas (see fig. 32, page 7, and paragraph 142); displaying on the display antenna operating parameters of antennas at selected sites within the network of antennas (i.e., operating parameters may be viewed in table form) (see fig. 33, page 7, paragraph 143); displaying on the

display user selected groups of antennas within the network of antennas (i.e., if a lobe is selected, two control bars may appear. Thus, one skilled in the art would unhesitatingly conceptualize that the appearance of the control bars represents a new graphic display) (see fig. 31, page 7, and paragraph 139); displaying on the display user selected antenna operating parameters for selected groups of antennas within the network of antennas i.e., the viewed operating parameters may be adjusted by selecting a box. Thus, the selecting of a box to adjust operating parameters, represents a new graphic display) (see fig. 33, page 7, paragraph 143); and displaying on the display user created schedules for controlling selected antenna operating parameters of selected antennas within the network of antennas (see fig. 34, page 7, paragraph 143).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ausems et al., "User interface for handheld communication device," Pub. No. US 20030013483.

Bartholomew, "Antenna system and method," U.S. Patent No. 5818385.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on (571) 272-7799.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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